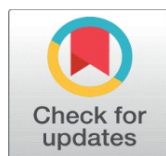
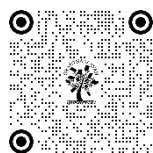


E-GOVERNANCE IN INDIA: EVOLUTION TO FUTURE CHALLENGES

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ABSTRACT

From 1947 until 1984, India saw a great deal of discussion about good governance, with the transition from traditional to modern, effective administration at the forefront of all official discussions. After that, India saw a computer-based era from 1984 to 1995 and an Internet-based era starting in 1995. Twelve minimal agendas for implementing E-governance in all union ministries and departments were drafted by India in 2000. E-governance has become a practical instrument for increasing government accountability, transparency and responsibility. It also reduced the amount of time needed to provide services. But the digital divide is a significant issue in India's E-governance development, preventing some groups of people from using information and communication technology. This hinders the process of integrating people into government administration, which is one of the main objectives of E-governance initiatives in India. India is moving closer to being a fully digital economy, and E-governance is being applied to every aspect of government operations. Simultaneously, issues including the digital divide, infrastructure development for the process' overall success, public digital education, and electronic device subsidies must protect, closing the digital barrier across different groups of people, and closing the gap between those who participate in E-governance and those who do not.

Keywords: -Governance, E-Government, Information and Communication Technology, Digital India, Tele Communication Index, E- Government Development Index

1. INTRODUCTION

E-Governance is an important instrument for improving government service delivery to citizens. It not only accelerates governance but also encourages citizen engagement in government administration, resulting in greater transparency and accountability of government administration. In a nutshell, E-governance is the process of utilizing Information and Communication Technology (ICT) in the delivery of government services to its citizens, (Barthwal - 2003). Normally a distinction is needed on E-Governance and E-Government though the terms often use interchangeably in the discussion of E-Governance. E-Government is the process of delivering government services to citizens using ICT, whereas E-Governance is a broader term that encompasses all aspects of the E-Government process, such as efficiency, speed with which it operates transparency and citizen participation in the administration process (Bannister and Connolly-2012).

Thus E-government is the service delivery of the Government to Citizens (G2C), Government to Business (G2B), Government to Government (G2G) and Government to Employees (G2E). United Nations (2013) in their report the human rights case against corruption illustrates the direct relationship between the reduction of corruption cases among

countries and the application of the E-Governance technique of public administration. If governments want to make their efforts more effective and free of corruption, the first step is to develop a solid E-Government system in their country. The best strategy to eliminate corruption is to strengthen the E-Government process in all of its activities and allow citizens to engage in the administration process. For this, the government should provide an environment in terms of digital infrastructure and initiatives to eradicate the digital divide, particularly among the country's deprived groups. The policy concept is to create a vision plan for developing a digitalized economy, as well as policies and programmes to remedy its flaws. In this framework, it makes attempts to identify the process of E-governance in the Indian setting, how the programmes of National E-governance Plan and Digital India initiatives aid in the process and the limitations and future challenges of E-governance.

1.1. THE MAIN OBJECTIVES OF THE STUDY ARE

The study attempts

- 1) To understand the importance of E-Governance
- 2) To understand the evolution process towards E-Governance in India
- 3) To understand the role of Digital India in strengthening the process of E-Governance

2. METHODOLOGY AND DATA SOURCES APPLIED FOR THE STUDY

This study is based on secondary sources of data, and the material was collected and organized in accordance with the study's objectives. The study relied on data from national, international publications, various official reports, and the official websites of the relevant India Government Ministries.

3. IMPORTANCE OF E-GOVERNMENT

To begin, it is vital to understand the distinction between Governance and Government, even though the terms are sometimes used interchangeably. Governance is a term that incorporates all institutional frameworks, and this authority is entrusted with the duty to develop and implement policies inside specific territories, known as nations. The government, on the other hand, demonstrates the efficacy and speed with which policies and programmes are developed, implemented, and practiced with specific goals. This distinction applies to the evaluation of E-Government and E-Governance as well. Governance is defined by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) as the process of applying the power of the authority in the country's management authority. Similarly, E-governance, on the other hand, defines the use of digital applications in the administration medium, which will naturally increase the efficiency of government services in terms of service delivery time, accountability of government activities, and increased people's participation.

The decision of the Government to improve the efficiency of the governance through the strengthening of the digital infrastructure and the enhancement of it are crucial in the process of E-Governance while the various laws and policies which determines overall efficiency of E-governance are the matter of E-Government. According to the World Bank, E-governance is the process by which the government employs the capabilities of Information and Communication Technologies (ICT) in the administration process to improve the interaction between the government and its population, government to business, and government to government. The final outcome of implementing E-governance is better delivery of government services, enhanced transparency and accountability, which will boost government efficiency, less corruption, lower administrative expenses, more income, and so on (2nd ARC Government of India 2008).

The efficiency of E-Governance services is directly proportional to the efficiency of the digital infrastructure and the active engagement of citizens. Implementing comprehensive E-Governance in all areas of government activity will assist to minimize corruption, make government activities more transparent, and shorten the time required to deliver services to citizens. In terms of data management, E-Governance is useful for tracking and storing data without loss.

4. E-GOVERNANCE IN INDIA- EVOLUTION

E-government evolution has a long history in India, with initiatives to be efficient and modernized in government dating back since independence. There were a lot of discourses about good governance in India from 1947 to 1984, and

the shift from traditional administration to contemporary and efficient administration was at the centre of all official talks. It was followed by a computer-based period in India from 1984 to 1995, and an Internet-based period in India beginning in 1995. During 1960s computers were required in national level planning and the department of electronics is established in India in 1966 based on the recommendations of Bhabha Committee and its aim was to support electronic and computer industry revolution of India. In the year 1977, India started National Informatics Centre and it was the milestones in India's information technology development. Previously, in 1975, India established the Computer Maintenance Corporation (CMC) and the National Informatics Centre Networks (NICN). Following this, the District Information System of National Informatics Centre Networks (DISNIC) was inaugurated in 1987, as a first step in the direction of India's IT strategy, which was adopted in 1984. India constituted a national task force on information technology and software development in 1998 and by the year 2000 India had drafted twelve minimum agendas for enacting E-governance in all union Ministries and Departments. The department of Electronics and Information Technology along with Department of Administrative Reforms and Public Grievance defined the National E-governance Plan (NeGP) in the year 2006.

In short by the end of the 1980s, India had begun to rethink the country's centrally run administration, which was more of a mixed economy; however, the consequences were less than ideal. The Indian economy was experiencing unemployment and poverty, with a growth rate of roughly 3.5 percent. The government was forced to implement the International Monetary Fund's (IMF) structural adjustment policies, which eventually led to the introduction of economic deregulation in 1991. The constitutional amendments of the 73rd and 74th cleared the door for decentralisation of powers to local authorities, which has also had an impact on redefining the concept of good governance in India. Good governance has been replaced by E-government. E-governance has emerged as a viable tool for making government more transparent, responsible, participative, and less time-consuming in-service delivery.

On the occasion of India's Independence Day, 15 August 2002, the Prime Minister of India announced the fifteen crucial actions to be taken by the country's administrative departments, one of which was the notion of E-governance. Transparency and accountability at all levels of government activities. In the same year, the Indian government announced at the National Development Council (NDC) that E-governance may greatly contribute to the process of improved governance in the nation, and it is the main emphasis of twelfth plan (Singh: 2010). With introduction of the E-Governance process at all levels of government the notion of governance to good governance strengthened in India. The National Human Development Report (2001) emphasized the significance of transitioning from traditional governance to the more efficient and transparent administration of E-government. According to the report, implementing the E-governance process would undoubtedly expedite the process of sustainable development by altering the scope and role of governance in connection to the market and society. As a result of the government's deliberate choice, the notion of E-governance has exploded throughout India. The Indian government enacted the National E-governance Plan (NEP) in 2006, and since then, the discussion of adopting the idea of E-governance has become cardinal across all administrative domains. However, the terms E-governance and E-government were used interchangeably. The 11th Report of India's Second Administrative Commission (2008) attempted to define the idea of E-governance by compiling all definitions of E-governance provided by International Organizations.

Since India opened its borders in 1991, the phrase "E-governance" has been used by international organizations as a catch-all. India chose the LPG (Liberalisation, Privatisation, and Globalisation) approach, and the definition and implementation of E-governance by using Information and Communication Technology (ICT) is critical to speeding up the government's decision and implementation process. Though India began its attempts to establish computer-based administration in the 1980s, the speed of operation was quite slow until 1990, and the process of E-governance grew more popular in India about 1998-1999. According to Sreekumar (2008) and Madon (2009), the E-governance style of administration was primarily directed at urban middle-class people, but after the turn of the century, the relevance of such digital administration in rural regions began to be considered in India. When India passed the National E-governance Plan (NeGP) in May 2006, all doubts and questions about E-governance were answered because the Act laid a solid foundation for the implementation of Information and Communication facilities in government services and envisioned making all government services available to the common man in his neighbourhood through public delivery outlets while ensuring efficiency, transparency, and reliability of such services at a low cost. (GOI, 2006). National E-Governance plan along with the 27 mission mode projects and 8 projects components implements a comprehensive approach toward the E-governance process in India.

Following the implementation of the Act (National e-Governance Plan) in 2006, the next phase is to determine the operational effectiveness of that procedure in the various government sectors of the nation including Panchayat raj institutions that govern the majority of India. The constitutional mandate is to provide services via urban corporations, municipalities, and panchayats. In the Indian context of public administration, how successfully E-governance provides its intended services in local self governments and the problems connected with it are essential. The National E-Governance Plan incorporates E-Governance efforts from around the country, with an emphasis on infrastructure development and digitalization to provide internet access in distant communities. Under the Digital India initiative, the government recommends adopting "e-Kranti: National E-Governance Plan (NeGP) 2.0" to change E-Governance and use new technologies like cloud and mobile platforms for service integration.

Former Indian President APJ Abdul Kalam is a strong supporter of E-governance implementation. E-governance, in his opinion, would revolutionize the process of public administration in India by increasing transparency and accountability. Adopting technology in all aspects of government would elevate the government process to a new level in India, he believed.

To summarize all of the definitions of E-governance in the context, the process of E-governance in India is viewed as the government's deliberate attempt to apply Information and Communication Technology (ICT) in government service delivery, which will undoubtedly shift the ways of traditional public administration to more time-saving, efficient, transparent, and participatory types of government. In the context of India, initiatives to transition to E-government administration are both simple and difficult. The ease defines India's educational and technical achievements, but the problematic element of the process is the digital divide that will be created by digitalization. It is a problem for the government to enable citizens, particularly those with low incomes and illiteracy, to access E-government services. The inclusion of certain groups of individuals, as well as the policies and programs that support them needs special consideration. (Vasu Deva 2005). As the term defines E-governance is a broader term that includes the political aspects of the government too. The political aspects include the government's institutional structures, decision-making and execution capabilities, and the depth of the government's connection with people, the business community, and civil society. The technical parts of E-governance deal with the construction of infrastructure for the delivery of E-governance services and its public administration, among other things. So E-government though share its connection with E-governance it's better to understand E-government as a subset of E-governance.

5. DIGITAL INDIA AND E-GOVERNANCE

The notion of Good Governance is not finished; it is always evolving. Information has become the key source for citizen-friendly governance in the current digital age because it provides transparency, accountability, accuracy, and integration. It will always absorb changing socio-economic situations in society and grasp the modifications that need to be made in administration and its process. E-governance form of administration is a new technique to make government administration more effective and transparent. Several countries have recognized and begun to implement a more effective E-governance form of administration. However, it is focused on specific issues such as E-governance usage and connection, citizen involvement, and trust building in E-governance services, which is a huge barrier in many countries since people are scared to participate online due to privacy and security concerns. The first and greatest priority of E-governance administration should be to identify such problems and remedy them as efficiently as possible. The magnitude of problems varies each country, depending on its social, cultural, and economic development. For the success of E-governance administration, E-government should have a solution for all of these issues. In response to these concerns, the Indian government established 'Digital India'. Its goal is to turn India into a knowledge-based economy that is digitally empowered. The government launched Digital India on July 1, 2015, at a cost of 1.13 lakh core. The Prime Minister as the chairman of the programme, which aimed to reduce the delay in delivering government services to citizens through the application of digitalization of the process, the connectivity of the internet to the government's rural areas with optimum speed, and the design of the programme by the Deity (Department of Electronics and IT).

The UPA-led government in India announced NeGP (e-governance) and a digitally linked India, while the NDA administration expanded the initiative and launched Digital India. The Digital India programme was created in response to the problems that NeGP was experiencing, such as a lack of basic infrastructure facilities for the program's expansion, user security and data protection, bridging the gap between E-governance participants and non-participants, and bridging the digital divide among various groups of people.

6. VISION OF DIGITAL INDIA

Digital infrastructure aims to offer citizens high-speed internet, internet identity, mobile phones, bank accounts, common service centers, sharable private cloud space, and secure cyberspace. The government will offer real-time governance and services on demand on online and mobile platforms, seamlessly integrated across departments and jurisdictions. Citizen documents will be made available on the cloud platform, eliminating the need for citizens to produce documents. Cashless electronic transactions will generate business, and Geographical Information Systems (GIS) will be integrated with development schemes. Empower rural citizens by enhancing their digital literacy through collaborative platforms and native language resources. This will enable their participation and integrate data from cloud computing platforms into development schemes, ensuring a seamless digital experience.

7. DIGITAL INDIA COMPRISES NINE PILLARS.

- Broadband Highways will cover 250,000 Grama Panchayaths in rural areas by December 2016, with virtual network operators for service delivery and communication infrastructure for urban areas. The programme integrates SWAN, NKN, and NOPN for national information infrastructure.
- Universal access to phones expected for Financial Year 2014-18.
- Public internet access program transforms post offices into multi-service centers.
- E-governance reforms government through technology, enhancing business processes, improving transactions, and implementing electronic databases for efficient, effective information management.
- E-Kranti offers electronic services for education, health, planning, agriculture, security, financial inclusion, and justice, enhancing access to technology for various sectors.
- The government engages citizens through social media and web platforms to inform them about MyGov.in, promoting online hosting and communication between citizens and the government.
- Electronic manufacturing aims for net zero import, focusing on Fabs, Fab-less design, set-top boxes, Vsats, mobiles, consumer electronics, smart energy meters, smart cards, and micro-ATM.
- Train people in smaller towns and villages for IT sector jobs, service delivery agents for viable business delivery IT services, and telecom service providers for tailored workforce training.
- Early harvest programs utilize IT platforms, e-greetings, and biometric attendance.

As a result, the Digital India programme has mandated electronic delivery of government services to improve public accountability. Corruption is a major issue in a large country like India, and the Digital India initiative seeks to tackle it. It also aimed eliminating paper work, saving trees, and conserving the environment. The national scholarship portal, a component of Digital India, automates the whole scholarship process, from application submission through sanction and disbursement, for all government-provided scholarships. The internet promotes knowledge in India's countryside, helping and boosting daily lives. Individuals will have bank accounts. However, the initiative confronts significant implementation hurdles in India.

8. CHALLENGES OF DIGITAL INDIA INITIATIVE

Converting the economy to a digitalized one via the Digital Economy Initiative is fraught with difficulties. The following are the primary impediments to the success of the Digital India initiative:

- Implementation issues, such as: India's diverse culture includes language, customs, food habits, laws, and traditions. The Digital India programme aims to integrate the country digitally, but challenges include technology and language integration.
- Internet protocols vary across states due to hardware and software implementation, potentially causing connectivity glitches. A directive is needed to standardize software protocols to prevent such issues.

- Digital India aims to transform India into a digitally empowered knowledge economy, requiring coordination and cooperation from all government departments for full implementation.
- Public internet access is crucial for Digital India, but poverty and illiteracy in India hinder its expansion, with high illiteracy rates hindering its success.
- In today's internet-driven world, proper authentication and privacy norms are crucial for cyber security and access to online documents. Designing architectures with these measures ensures access and protection for citizens.
- National optical fibre network ensures broadband coverage, but nationwide connection access is challenging.

9. THE FUTURE PROSPECTIVE OF E-GOVERNANCE IN INDIA

Government of India, Ministry of Electronics and Information Technology (2023) E-Government Development Index (EGDI) in Global Indices predicts India's EGDI ranking based on several reports of the United Nations Department of Economic and Social Affairs EGDI survey from 2001. The EGDI is the weighted average of three important aspects of E-Government: the quality of online services as measured by the Online Service Index (OSI), the status of development of telecommunication infrastructure as measured by the Tele Communication Index (TCI), and the internet's human capital as measured by the Human Capital Index (HCI). The UN has rated India 105th in this year based on these indicators, with a composite rating of 0.58 EGDI. It shows that among the member countries of the United Nations the position of India is just average. Further United Nations (2021) suggests that the advancement of E-governance is inextricably linked with the active engagement of citizens and the private sector in the delivery of government services. As a result, every country must aggressively encourage all stakeholders to participate in government E-Services. In addition, international, national and individual collaboration will aid in the acceleration of E-government procedures in each country. According to the report, on the other hand, a lack of digital skills and basic information infrastructure threatens the rapid growth of the E-Governance process. The report covers the digital divide, which is characterized as a societal problem involving groups of people who have knowledge and access to Information and Communication Technologies (ICT) and those who do not. The affordability of electronics is one solution to the digital gap, particularly in underdeveloped nations. Collaboration among many stakeholders, such as national level institutes, governmental authorities, academic communities, civil organizations, and international communities, is critical to eliminate the digital divide.

In terms of India's E-governance development, the problem of digital divide is very high and it is leading to the exclusion of some categories of people from information and communication technology, which impedes the process of inclusion of people in government administration, which is envisioned as one of the major goals of E-governance efforts in India. The digital gap exists among several demographic groups, such as women and men, young and elderly, affluent and poor and most importantly urban and rural. (Singh: 2010). Another problem in this area is the construction and efficiency of infrastructure for E-governance. In India, huge rural areas still lack internet access, and current connections are plagued by issues such as slow speeds and exorbitant use fees.

United Nations (2020) E-Governance Survey, the General Secretary of the United Nations informed all member nations in the 2020 United Nations E-Governance Survey to "kick start a decade of delivery and action for people and planet." The plan is to employ E-governance capabilities to support and achieve the specified Sustainable Development Goals by 2030. The survey also attempts to assess the development and gaps in digital infrastructure development of its member nations, as well as provide relevant policy and strategic options for boosting its members' E-governance initiatives. They evaluate the quality of E-government development and performance, as well as identifying nations and local regions where the promise of Information and Communication Technology (ICT) development has not been completely realized. In order to accomplish the desired goals, inquires about the effectiveness of communications infrastructure, the amount of human understanding about adopting and using ICTs, and the availability of online services and their content. By analyzing the survey's core data, it reveals that there has been a considerably faster growth in the adoption and deployment of ICTs in government services; it is more data centric, artificial, and block chain than in earlier time periods since the survey began in 2001. According to the poll, the value of the E-Government Development Index (EGDI) grew from 0.55 to 0.60 between 2018 and 2020. It should be emphasized that even in (Least Developed Countries) LDCs and landlocked countries, as well as small island developing nations, EGDI values are often over 0.50, increasing registrations by 29 percent. In terms of the digital development gap, the survey suggests that each country, in accordance with its E-Governance policy frameworks, should collaborate and implement policies and programs to

upgrade its E-Governance development, and closing the digital illiteracy gap is just as important as upgrading digital infrastructure.

India is progressing toward a fully digital economy, and the process of E-governance is being implemented in all areas of government activity. At the same time, challenges such as the digital gap, infrastructure development for the process's total success, digital education for the people, and subsidies for electronic devices must be recognized and addressed. It is true that the (National e-Governance Plan) NeGP 2006 and the Digital Economy initiative presented and highlighted the emphasis areas for the success of the country's E-governance activities. However, the implementation and evaluation of the effectiveness of those pillars are equally critical for the future of E-governance.

10. CONCLUSION

The integration of E-governance into the government administration process has accelerated the process of good governance. Implementing the capabilities of Information and Communication Technology in government administration will result in a more transparent, responsible, and time-efficient government administration process. India has a long history of attempting to transition to this form of E-governance procedure, but it has yet to overcome the problems connected with it. The National E-Governance Plan and the Digital India Initiative have provided a new direction to India's E-governance process. However, enormous problems such as infrastructure, digital divide, and people's engagement are critical to the success of E-governance in India. Taking into account India's position in terms of service quality as evaluated by the Online Service Index (OSI), Tele Communication Index (TCI), and the internet's human capital as measured by the Human Capital Index (HCI), the UN ranked India 105th in 2022, with a composite rating of 0.58 EGDI. It demonstrates that India's status among United Nations member countries need to be improved.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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